ABSTRACT

A parabolic reflector antenna having a truncated parabolic surface such that the edges of the parabolic reflector form a rectangular side edge configuration. The parabolic reflector antenna is comprised of a truncated parabolic reflector, and at least one truncation wall projecting outwardly from the truncated side edges of the parabolic reflector. In addition, an antenna feed would be located at the focus of the parabolic reflector. As a result, the use of truncation walls does not increase the axial extent of the parabolic reflector. The truncation walls do not extend beyond the outer corners of the parabolic reflector. Furthermore, the additional use of truncation walls does not increase the overall size of the antenna or the size of the radome required to house the antenna. The use of one or more truncation walls advantageously increases or decreases the antenna sidelobe levels on either side of the reflector antenna.